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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/765,965	01/19/2001	Debra Hensgen	OPTV-062/ORG/US	8232

44015 7590 10/31/2006

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EXAMINER
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SHANG, ANNAN Q

ART UNIT	PAPER NUMBER
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2623

DATE MAILED: 10/31/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 09/765,965	Applicant(s) HENSGEN ET AL.	
	Examiner Annan Q. Shang	Art Unit 2623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 18 August 2006.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-56 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-56 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 08/18/06 has been entered.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-9, 10-16, 18-22, 25-36, 39-52 and 54 are rejected under 35 U.S.C. 102(b) as being anticipated by **Freeman et al (5,724,091)**.

As to claim 1, note the **Freeman** reference figures 1-7, discloses compressed digital data interactive program system and further discloses a method for processing broadcasts, comprising:

Receiving a broadcast of a program (Receiver 7), the broadcast containing a plurality of perspectives of the program, each of the perspectives providing a view of a

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given scene from a different angle (col.4, lines 21-34, col.6, lines 23-34, line 43-col.7, line 30);

Presenting a first perspective, the first perspective comprising a first perspective of a portion of the program; storing at least one of the pluralities of perspectives (col.6, lines 23-34, line 43-col.7, line 30);

Providing input from the a viewer (RC-130) which indicates a desire to replay the portion of the program from a second perspective of the plurality of perspectives (col.6, lines 23-34, line 43-col.7, line 30);

Identifying (Microprocessor 'MP' 108) in the first perspective a first point in time in the program, which corresponds to the beginning of the portion, responsive to the input; Automatically (MP-108) determining a second point in time in the second perspective where the second point in time comprises an approximation of the first point in the program and presenting the portion of the program from the second perspective to the viewer, beginning at the second point in time (col.6, lines 23-34, line 43-col.7, line 30 and col.10, line 50-col.12, line 30, col.13, line 36-col.14, line 1+ and col.15, line 16-col.16, line 1+)

As to claim 2, Freeman further discloses where presenting the first perspective and storing are performed simultaneously (col.11, line 4-col.12, line 24).

As to claim 3, Freeman further discloses where storing the at least one of the first perspective is performed automatically (col.11, line 4-col.12, line 24).

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As to claims 4 and 5, Freeman further discloses where presenting at least one of the plurality of perspectives includes presenting at least one of the stored perspectives and storing are performed simultaneously (col.11, line 4-col.12, line 24).

As to claim 6, Freeman further discloses periodically storing meta-data corresponding to each of one or more of the received plurality of perspectives of the program, the meta-data comprising at least time and offset information for each of corresponding one or more plurality of perspectives (col.11, line 4-col.12, line 24).

As to claim 7, Freeman further discloses where receiving the broadcast includes receiving a plurality of related video streams, each stream including one of the perspectives (col.11, line 4-col.12, line 24).

As to claim 8, Freeman further discloses where identifying the first point in time in the first perspective comprises identifying a first offset (col.11, line 4-col.12, line 24) in the stored file corresponding to the first perspective.

As to claim 10, Freeman further discloses where storing at least one of the plurality of perspectives includes storing the perspectives in at least one circular buffer (col.11, line 4-col.12, line 24).

As to claim 11, Freeman further discloses where determining the second point in time in the second perspective comprises locating an offset in the second perspective which is near the first offset (col.11, line 4-col.12, line 24).

As to claim 12, Freeman further discloses where determining the second point in time in the second perspective comprises: searching stored meta-data to identify two consecutive offsets corresponding to the first perspective, such that the interval

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represented by the two consecutive offsets includes the first offset; utilizing a stored time corresponding to each of the two consecutive offsets to determine an approximated point in time; searching stored meta-data to identify two consecutive times corresponding to the second perspective, such that the interval represented by the two consecutive times includes the approximated point in time; utilizing a stored offset corresponding to each of the two consecutive times to determine an approximated offset and locating an offset in the second perspective which is near the approximated offset (col.11, line 4-col.12, line 24, col.13, line 36-col.14, line 1+ and col.15, line 16-col.16, line 1+).

As to claims 13-14, Freeman further discloses where the plurality of perspectives of the program comprises MPEG data streams, and where the offset in the second perspective, which is near the first offset corresponding to an MPEG I-frame and where the offset in the second perspective which is near the approximated offset corresponds to an MPEG I-frame (col.5, lines 18-20, col.11, line 4-col.12, line 24, col.13, line 36-col.14, line 1+ and col.15, line 16-col.16, line 1+).

As to claim 15, the claimed "a method for playing a multi-perspective program comprising..." is composed of the same structural elements that were discussed in the rejection of claim 1.

Claim 16 is met as previously discussed with respect to claim 6.

Claim 18 is met as previously discussed with respect to claim 11.

Claim 19 is met as previously discussed with respect to claim 12.

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As to claim 20, the claimed "a system for recording a broadcast including a plurality of perspectives of the program comprising..." is composed of the same structural elements that were discussed in the rejection of claim 1.

Claim 21 is met as previously discussed with respect to claim 2.

As to claim 22, Freeman further discloses where the recorded perspectives to the viewer without interrupting the recording of the broadcast (col.5, lines 18-20, col.11, line 4-col.12, line 24, col.13, line 36-col.14, line 1+ and col.15, line 16-col.16, line 1+).

As to claim 23-24, Freeman further discloses where the receiver is a STB, which receives television signal, via a camera, broadcast, cable, satellite signals, etc., and where the storage device is contain within the STB or removable storage (col.6, lines 23-34, col.5, lines 18-20, col.11, line 4-col.12, line 24 and col.13, line 36-col.14, line 1+).

Claim 25 is met as previously discussed with respect to claim 6.

As to claim 26, Freeman further discloses where the storage device is selected from the group consisting of: a magnetic disk, an optical disk and a flash memory (col.2, lines 26-44).

Claim 27 is met as previously discussed with respect to claim 11.

Claim 28 is met as previously discussed with respect to claim 12.

As to claim 29, O'Connor further discloses where the receiver comprises at least one tuner (col.6, lines 23-col.7, line 1+ and col.11, line 4+).

As to claim 30, Freeman further discloses where the receiver comprises a demultiplexer and a processor (col.6, lines 23-col.7, line 1+ and col.11, line 4+).

As to claim 31, the claimed "a system for presenting broadcasts..." is composed of the same structural elements that were discussed in the rejection of claim 1.

Claim 32 is met as previously discussed with respect to claim 2.

Claim 33 is met as previously discussed with respect to claim 2.

Claim 34 is met as previously discussed with respect to claim 5.

Claim 35 is met as previously discussed with respect to claim 5.

Claim 36 is met as previously discussed with respect to claim 6.

As to claims 39-40, Freeman further discloses where the receiver is configured to receive a plurality of audio and/or video streams associated with the plurality of perspectives and where the A/V streams includes one of the perspectives (col.6, lines 23-col.7, line 1+ and col.11, line 4+).

Claim 41 is met as previously discussed with respect to claim 11.

Claim 42 is met as previously discussed with respect to claim 12.

As to claim 43, Freeman further discloses where the storage device includes at least one circular buffer 106 for storing at least one of the pluralities of perspectives (col.6, lines 23-col.7, line 1+ and col.11, line 4+).

As to claim 44, Freeman further discloses where the processor is configured to search at least one of the stored perspectives (col.6, lines 23-col.7, line 1+ and col.11, line 4+)

As to claim 45, the claimed "a computer program product for processing broadcasts, comprising..." is composed of the same structural elements that were discussed in the rejection of claim 1.



Claim 46 is met as previously discussed with respect to claim 2.

Claim 47 is met as previously discussed with respect to claim 6.

Claim 48 is met as previously discussed with respect to claim 4.

Claim 49 is met as previously discussed with respect to claim 2.

Claim 50 is met as previously discussed with respect to claim 11.

Claim 51 is met as previously discussed with respect to claims 39-40.

Claim 52 is met as previously discussed with respect to claim 12.

Claim 54 is met as previously discussed with respect to claim 43.

As to claims 55-56, Freeman further discloses where receiving the broadcast includes simultaneously receiving a plurality of related video streams, each stream includes one of perspectives, where the streams do not have a same bit rate and where the locating comprises performing interpolation (col.4, line 50-col.5, line 52, col.10, line 50-col.11, line 1+ and col.15, line 6-col.16, line 1+)

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 9, 17, 23-24, 37-38 and 53 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Freeman et al (5,724,091)** and further in view of **Abecassis (6,289,165)**.

As to claims 9, 17, 37-38 and 53, Freeman teaches all the claimed limitation as previously discussed with respect to claims 1, 15, 36 and 45, but fails to explicitly teach where presenting the first perspective includes presenting the first perspective in one window of a display and presenting at least one of the plurality of perspectives includes presenting a second perspective from the plurality of stored perspectives in a different window.

However, note the **Abecassis** reference figures 1-2 and 15, discloses a system and method of playing interleaved presentation, where a multimedia player or STB permits a viewer to obtain multiple presentation of a video(s), multimedia and other services and customizes the playing of the stored video, playing the plurality of presentation of perspectives in multiple windows on a display device (col.6, lines 19-48, lines 58-67, col.13, lines 7-30, col.17, line 61-col.18, line 10 and col.59, line 27-col.60, line 1+).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teaching of Abecassis into the system of Freeman to enable the user to simultaneously view different portions of the video on a display device.

As to claims 23-24, Freeman further teaches a receiver, which receives video transmitted via camera, television signal, broadcast, cable, satellite, etc., decodes the video stream, stores and playback as desire via a Video out port connected to a monitor or TV screen or other display, but silent to explicitly use a STB which includes a storage device.

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However of Abecassis teaches various multimedia receiving or player devices including a STB with storage capabilities (col.6, lines 19-48).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teaching of Abecassis into the system of Freeman to provide a STB connected to conventional TV sets, so that end users don't have to buy a new TV along with the computer elements.

### ***Response to Arguments***

6. Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection. The amendment to all the independent claims necessitated the new ground(s) of rejection discussed above. This office action is non-final.

### ***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Freeman et al (7,079,176) disclose digital interactive system for providing full interactive with live program events.

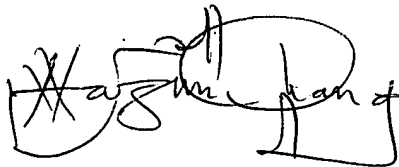
Freeman et al (2002/0129374) disclose compressed digital-data seamless video switching system.

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8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Annan Q. Shang** whose telephone number is **571-272-7355**. The examiner can normally be reached on **700am-400pm**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Christopher S. Kelley** can be reached on **571-272-7331**. The fax phone number for the organization where this application or proceeding is assigned is **571-273-8300**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the **Electronic Business Center (EBC)** at **866-217-9197 (toll-free)**. If you would like assistance from a **USPTO Customer Service Representative** or access to the automated information system, call **800-786-9199 (IN USA OR CANADA)** or **571-272-1000**.

A handwritten signature in black ink, appearing to read 'Annan Q. Shang', with a stylized flourish at the end.

**Annan Q. Shang**